CHAPTER 2. PURPOSE AND NEED FOR ACTION

The Federal government built the River Water System at the Savannah River Site (SRS) near Aiken, South Carolina, during the 1950s. During the time when the primary mission of the Site was to produce defense nuclear materials such as tritium for use in weapons, the mission of the River Water System was to provide cooling water to the SRS production reactors. Over the past several years, the SRS mission has changed. The mission at the SRS now emphasizes (1) the safe management of radioactive materials such as spent nuclear fuel for which it is responsible until the U.S. Department of Energy (DOE) can dispose of them safely and (2) the cleanup and environmental restoration of areas affected by more than 40 years of nuclear and industrial activity.

In March 1993 DOE placed K-Reactor, the last of the operating SRS production reactors, in a standby condition. In December 1995 Secretary of Energy O'Leary announced the Department's decisions on alternatives proposed for the production of tritium (60 FR 63878). Because these decisions did not involve the use of K-Reactor, DOE made an administrative decision to place it in a state of cold shutdown with no provision for future restart. In other words, from the perspective of having to supply cooling water to the reactors, there is no longer a mission for the River Water System.

In the future DOE probably will receive less funding than in past years, and so must determine the most effective and responsible use of its funds. The *DOE Savannah River Stategic Plan* (DOE 1996a) describes the changing mission, vision, and values at the SRS. In the plan, DOE commits to identify and dispose of excess infrastucture (items that once were part of the processes with which the Site accomplished its original mission but that have limited value for current Site missions). To that end, the Department has identified the River Water System as infrastructure that is both surplus and costly to operate and maintain. In 1993, for example, repairs to the Par Pond dam cost more than $10 million. Future costs will increase as equipment reliability decreases and replacement parts become more difficult to obtain.

Therefore, in a climate of decreasing funding for SRS missions, DOE must determine if it should continue to operate a system that has no current mission and that will become more expensive to operate as time passes. This environmental impact statement analyzes the impacts of the proposed shutdown of the River Water System. DOE proposes to perform the shutdown to save money; that is, to prevent further expenditures of funds to operate a system that has no current mission.